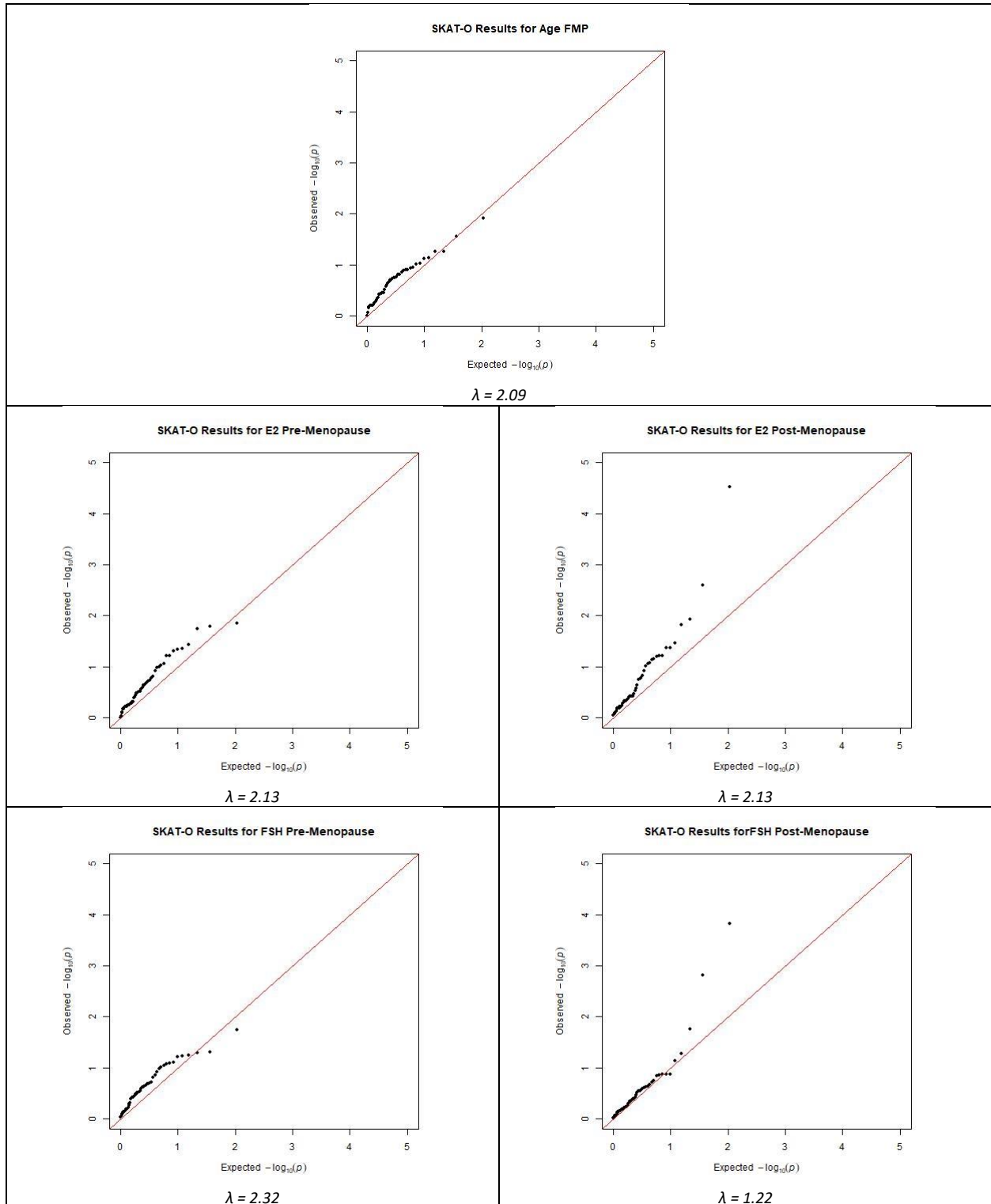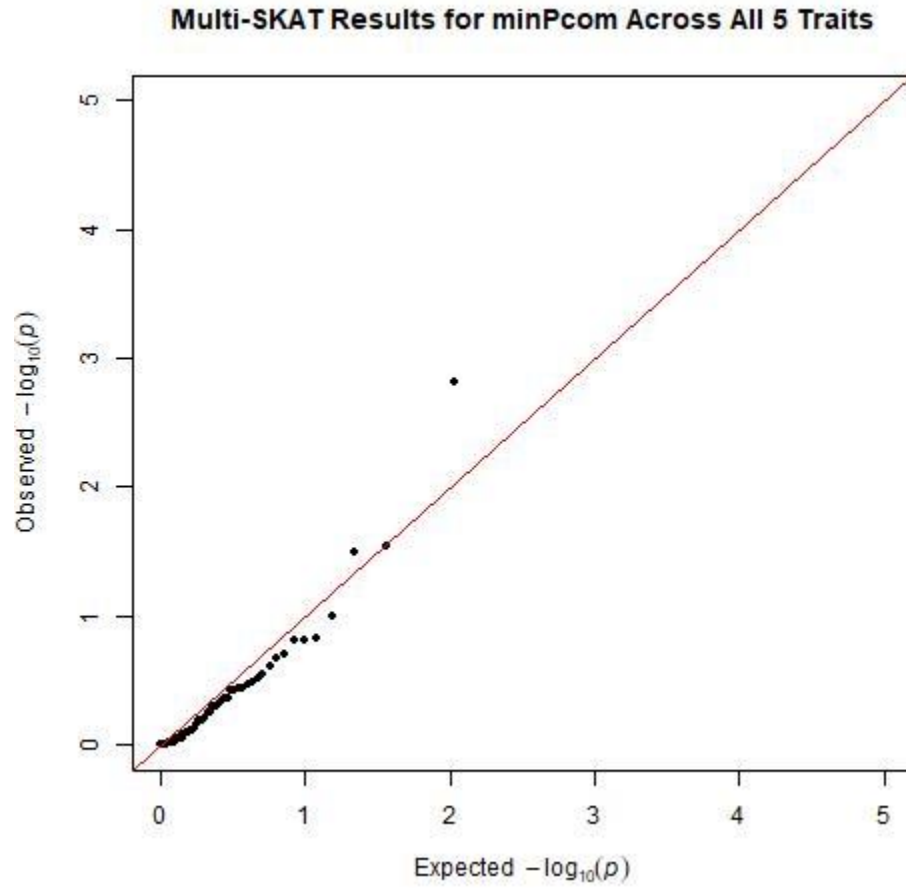Supplementary Figure 1. Quantile-quantile (QQ) plots for the minPhen for each trait of interest in Stage 1 Discovery in 347 White women from the Study of Women's Health Across the Nation (SWAN).

minPhen: minimum SKAT-O p-value; FMP: final menstrual period; E2: estradiol; FSH: follicle stimulating hormone
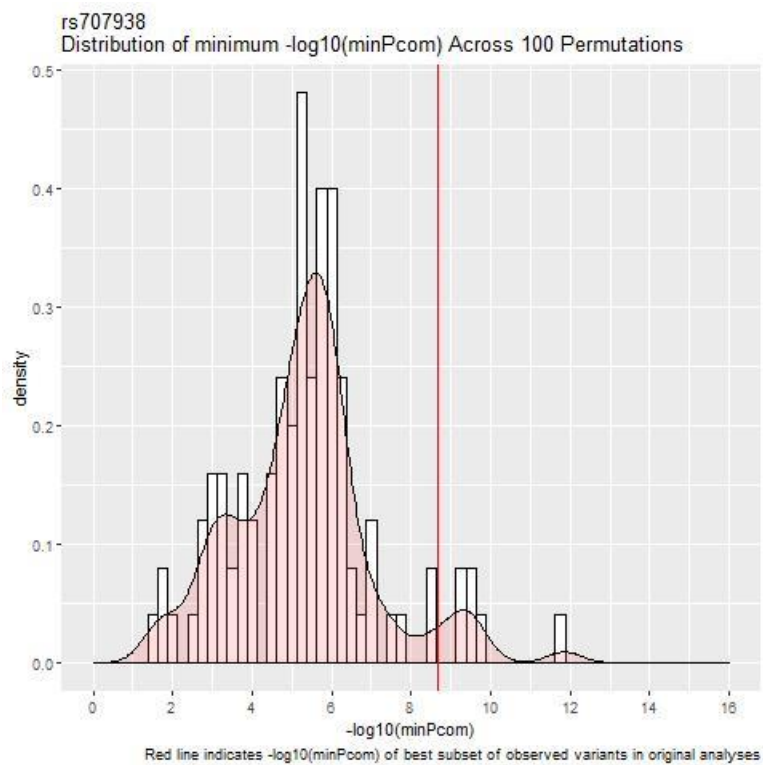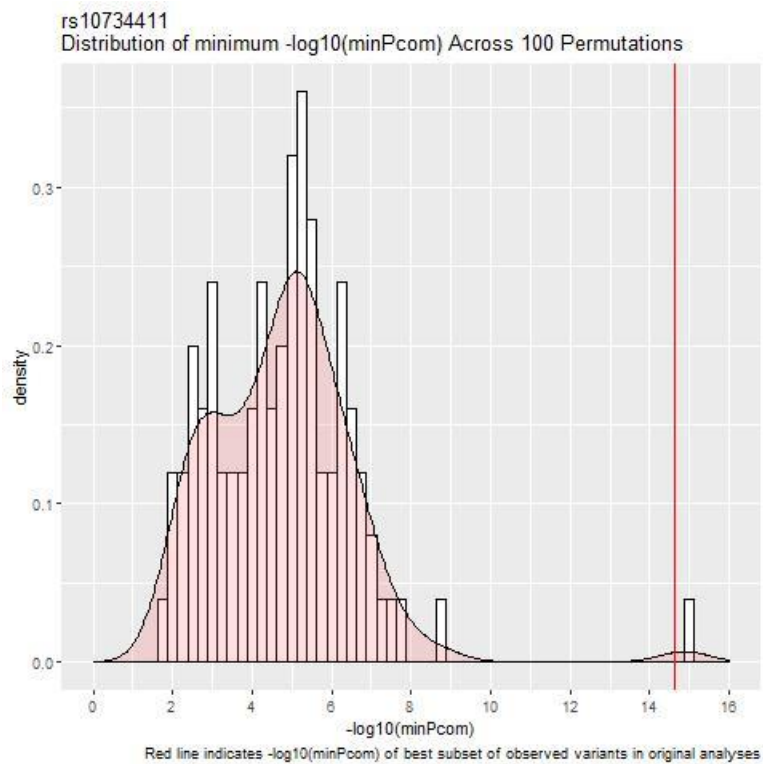
Supplementary Figure 2. Quantile-quantile (QQ) plot for the Multi-SKAT minPcom across all 5 traits of interest in Stage 1 Discovery in 347 White women from the Study of Women's Health Across the Nation (SWAN).
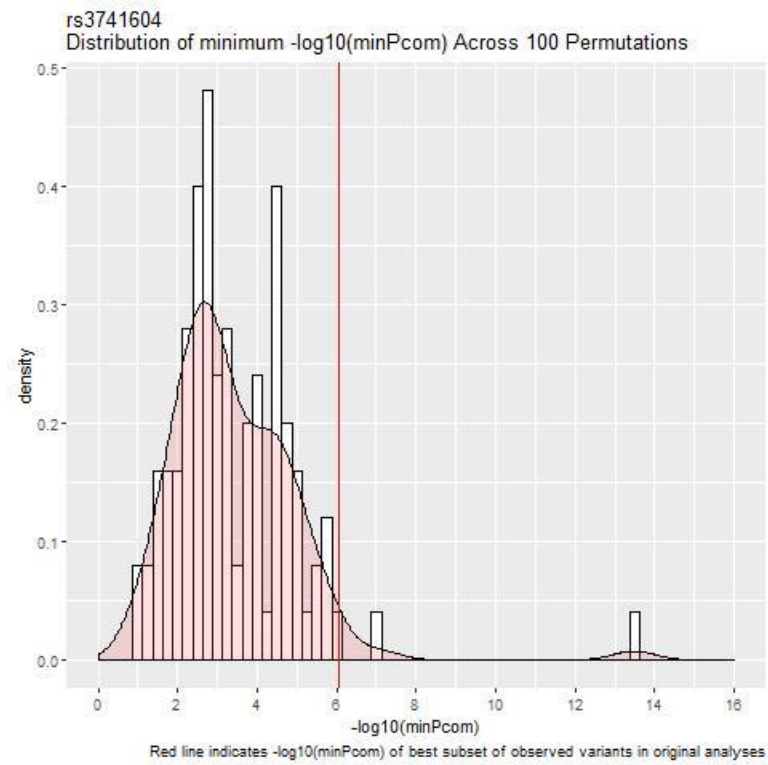

Multi-SKAT Results for minPcom Across All 5 Traits

λ = 0.50

minPcom: Multi-SKAT minimum P value based on omnibus test across all SKAT and Burden-type kernels

Supplementary Figure 3. Backward variant elimination simulation study of 3 regions of interest: Distribution of minimum -log10(minPcom) across 100 permuted datasets of 347 White women from the Study of Women's Health Across the Nation (SWAN).

rs10734411
Distribution of minimum -log10(minPcom) Across 100 Permutations
Red line indicates -log10(minPcom) of best subset of observed variants in original analyses

rs707938
Distribution of minimum -log10(minPcom) Across 100 Permutations
Red line indicates -log10(minPcom) of best subset of observed variants in original analyses

rs3741604
Distribution of minimum -log10(minPcom) Across 100 Permutations

Red line indicates -log10(minPcom) of best subset of observed variants in original analyses

minPcom: Multi-SKAT minimum P value based on omnibus test across all SKAT and Burden-type kernels

Supplementary Figure 4. Heatmap matrix of pairwise linkage disequilibrium statistics for the best subset of variants in the region of interest around rs10734411 among 347 White women from the Study of Women's Health Across the Nation (SWAN).